

## REMARKS

This application has been reviewed in light of the Office Action dated November 12, 2002. Claims 1-7, 9-15, and 17-27 are presented for examination, of which Claims 1, 6, 9 14, 17, 22, 26, and 27 are in independent form. New Claims 25-27 have been added to provide Applicants with a more complete scope of protection. Claims 1-3, 6, 7, 9-15, and 17-23 have been amended to define more clearly what Applicants regard as their invention. Favorable reconsideration is requested.

The Office Action rejected Claims 1-4, 9-12, and 17-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,430,612 ("Iizuka") in view of U.S. Patent No. 5,778,185 ("Gregerson et al."). Claims 5, 13, and 21 stand rejected under § 103(a) as being unpatentable over Iizuka and Gregerson et al., and further in view of the article "The Future of Enterprise Printing" from the Network Design Manual ("Enterprise Printing"). Claims 6, 7, 14, 15, 22, and 23 stand rejected under § 103(a) as being unpatentable over Iizuka in view of U.S. Patent No. 6,369,909 (Shima). Applicants submit that independent Claims 1, 6, 9 14, 17, 22, 26, and 27, together with the claims dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

The aspect of the present invention set forth in Claim 1 is directed to a device searching apparatus that searches for at least one device on a network. The apparatus includes input means, first and second search means, and output means. The input means is used to enter first and second search conditions in order to search for a desired device on the network. The first search means searches for at least one device that satisfies the first search condition, and the

second search means searches for at least one device that satisfies the second search condition.

Based on the searches performed by the first and second search means, the output means outputs a search result such that a device that satisfies the first search condition may be discriminated from a device that satisfies the second search condition.

One feature of Claim 1 is that the apparatus enables searches to be performed independently for a plurality of search conditions, based on a single search instruction. That is, when an single instruction to start searching is inputted after a plurality of search conditions are inputted, an independent search is executed for each search condition. By virtue of this feature, devices that satisfy each search condition may be distinguishably displayed.

Iizuka relates to a system for managing devices connected to a network. Iizuka discloses a two-stage search method, in which a first search is performed to acquire outline information of a device and a second search is performed according to a user's instruction.

Gregerson et al., as understood by Applicants, relates to a system for finding a resource requested by a node. Apparently, Gergerson et al. discloses a technique that searches a database and counts nodes matching the resource. If the number of matches exceeds MAXMATCH, or a maximum number matches, the search process stops.

Applicants submit that a combination of Iizuka and Gregerson et al., assuming such combination would even be permissible, would fail to teach or suggest a device searching apparatus that includes "first search means for searching for at least one device that satisfies the first search condition," and "second search means for searching for at least one device that satisfies the second search condition," and "output means for outputting a search result based on

searches by said first search means and said second search means, wherein said output means outputs the search result such that a device that satisfies the first search condition may be discriminated from a device that satisfies the second search condition," as recited in Claim 1.

More specifically, Applicants submit that Iizuka does not teach or suggest performing independent searches, in which first search means searches for at least one device that satisfies a first search condition and second search means searches for at least one device that satisfies a second search condition. In the apparatus of Claim 1, searches by the first and second search means are performed independently and are executed at the same level. (That is, each search is not dependent on a result of another search.) A search result of the independent searches is outputted such that a device satisfying the first search condition found by the first search means may be discriminated from a device satisfying a second condition found by the second search means.

Applicants further submit that Gregerson et al. fails to remedy the deficiencies of Iizuka. The "CURRMATCHES=MAXMATCHES?" of step 703 in Fig. 19 of Gregerson et al. is understood to merely determine whether a number of current matches is equal to a maximum number of matches, which is not suggestive of performing independent searches and outputting a search result that enables a device found in a first search to be distinguished from a device found in a second search.

Accordingly, Applicants submit that Claim 1 is patentable over the cited art, and respectfully request withdrawal of the rejection under 35 U.S.C. § 103(a). Independent Claims 9, 17, and 26 include a feature similar to that discussed above, in which first and second

searches are independently performed based on first and second search conditions, respectively, and a search result of the searches is outputted such that a device found in the first search may be discriminated from a device found in the second search. Therefore, Claims 9, 17, and 26 also are believed to be patentable for at least the same reasons as discussed above.

The aspect of the present invention set forth in Claim 6 is directed to a device searching apparatus that searches for at least one device on a network. The apparatus includes management means, input means, first and second search means, output means, control means, and discrimination means. The management means manages a database that includes identification information for identifying a device on the network and static information associated with the device. The input means is used to enter first and second groups of attributes for searching for at least one desired device on the network. The first search means searches for at least one device from the database having the first group of attributes, and the second search means searches for at least one device from the database having the second group of attributes.

The output means outputs a search result that includes identification information of static information of a device having at least one of the first and the second groups of attributes. The control means adds dynamic information to the search result, according to a number of devices having at least one of the first and the second groups of attributes. The discrimination means discriminates a device with a high frequency of use, based on the dynamic information, which relates to a use history of devices on the network. In a case in which a number of devices having the first group of attributes is zero, the control means adds to the search result information of the device with the high frequency of use.

Shima et al., as understood by Applicants, relates to a system in which low-function printers are associated with a high-function printer to form a printer group. The high-function printer communicates with a host to notify the host of performance attributes of the printer group. Apparently, Shima discloses that printers are selected in accordance with a search condition, and when two or more candidate printers are found a verification process is performed (see Fig. 21).

Applicants submit that a combination of Iizuka and Shima, assuming such combination would even be permissible, would fail to teach or suggest a device searching apparatus that includes "first search means for searching for at least one device from the database having the first group of attributes entered using said input means," and "second search means for searching for at least one device from the database having the second group of attributes entered using said input means," and "output means for outputting a search result that includes identification information of static information of a device having at least one of the first and the second groups of attributes," and "control means for adding dynamic information to the search result, according to a number of devices having at least one of the first and the second groups of attributes," and "discrimination means for discriminating a device with a high frequency of use, based on the dynamic information, which relates to a use history of devices on the network," wherein, "in a case in which a number of devices having the first group of attributes is zero, said control means adds to the search result information of the device with the high frequency of use discriminated using said discrimination means," as recited in Claim 6.

Similar to Claim 1, the apparatus of Claim 6 performs independent searches based on first and second groups of attributes. If no devices are found having the first group of

attributes, the apparatus of Claim 6 adds to the search result information of a device with a high frequency of use. In contrast, the system disclosed in Shima only displays a device that has the lowest frequency of use, because one of the objects of the Shima system is to select the least-used printer. The apparatus of Claim 6 enables selection of a highly-used device when a search result yields no device having the first group of attributes. Shima apparently teaches away from such a feature, and Iizuka is silent regarding such a feature.

Accordingly, Applicants submit that Claim 6 is patentable over the cited art, and respectfully request withdrawal of the rejection under 35 U.S.C. § 103(a). Independent Claims 14, 22, and 27 include a feature similar to that discussed above, in which independent searches are performed for devices having first and second groups of attributes, respectively, and, when no device is found having the first group of attributes, information on a device with a high frequency of use is added to the search result. Therefore, Claims 14, 22, and 27 also are believed to be patentable for at least the same reasons as discussed above.

The other claims in this application depend from one or another of the independent claims discussed above and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual consideration or reconsideration, as the case may be, of the patentability of each claim on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and, therefore, its entry is believed proper under 37 C.F.R. § 1.116. Accordingly, entry of this Amendment, as an earnest effort to advance prosecution and

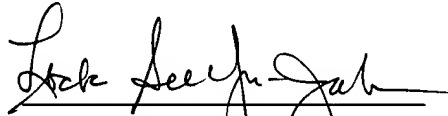
reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, it is respectfully requested that the Examiner contact Applicants' undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

No petition to extend the time for response to the Office Action is deemed necessary for the present Amendment. If, however, such a petition is required to make this Amendment timely filed, then this paper should be considered such a petition and the Commissioner is authorized to charge the requisite petition fee to Deposit Account 06-1205.

Applicants' undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

  
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